



The Regional Municipality of Peel
POLICE SERVICES BOARD
10 PEEL CENTRE DR., BRAMPTON, ON L6T 4B9

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June 30, 2022

Ms. Aretha Adams
Deputy Regional Clerk
A/Director of Clerks
Regional Municipality of Peel
10 Peel Centre Drive
Brampton, ON L6T 4B9

RECEIVED
June 30, 2022
REGION OF PEEL
OFFICE OF THE REGIONAL CLERK

Dear Ms. Adams,

RE: #11-06-22– 2022 VCOM Group Annual Report

On June 24, 2022 the Regional Municipality of Peel Police Services Board considered a report dated May 10th, 2022, from Deputy Chief A. Odoardi, Innovation and Technology Command, providing the Board with the annual report on the activities of the VCOM group.

The following motion was passed by the Board:

That the 2022 VCOM Group annual report be received;

And further, that the 2022 VCOM Group Annual Report be forwarded to Regional Council for information;

And further, that the 2022 VCOM Group Annual Report be forwarded to the Regional Fire Coordinator for information.

In keeping with the Board's motion, I have enclosed a copy of the 2022 VCOM Group Annual Report for distribution.

Should you have any questions or concerns, please do not hesitate to contact the Board office.

Yours truly,

Robert Serpe
Executive Director

REFERRAL TO _____
RECOMMENDED _____
DIRECTION REQUIRED _____
RECEIPT RECOMMENDED _____

Attach.

11-06-22



FORWARDED TO
POLICE SERVICES BOARD
DATE June 7, 2022

CHIEF OF POLICE

REPORT
Police Services Board

For Information

File Class: 1-01-02-01

Cross-Reference File Class: _____

PSB REC: JUNE 08, 2022
LOG #30-22
FILE CASS: V04

DATE: May 10, 2022
SUBJECT: 2022 VCOM GROUP ANNUAL REPORT
FROM: Anthony Odoardi, Deputy Chief, Innovation and Technology Command

RECOMMENDATION

IT IS RECOMMENDED THAT the 2022 Vcom Group Annual Report be received by the Police Services Board for information

AND FURTHER THAT, the 2022 Vcom Group Annual Report be forwarded to Regional Council for information.

AND FURTHER THAT, the 2022 Vcom Group Annual Report be forwarded to the Regional Fire Coordinator for information.

REPORT HIGHLIGHTS

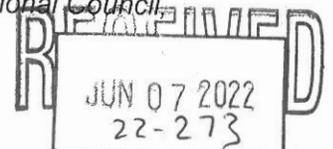
- System Activities & Service Levels
- Financial Trend Summary
- Private Public Safety Broadband Network Project (PSBN)
- Vcom Interference from LTE operations in the 800 MHz band

DISCUSSION

1. Background

In accordance with the June 8, 1995 agreement between the Regional Municipality of Peel, the City of Brampton, the City of Mississauga, the Town of Caledon, and the Peel Police Services Board, a Vcom Group was formed in the summer of 1997 to manage the operation of the radio system. Section 6 of that agreement states in part:

'The Vcom Group will be accountable to Regional Council through the Police Services Board and report annually in September of each year on its activities to Regional Council.



OFFICE OF THE CHIEF

through the Chief of Police to the Police Services Board with an information report forwarded to the Regional Fire Coordinator.'

2. Findings

Vcom Group Activities

The Vcom System entered its 25th year of operation, functioning well to support 7 public-safety/public-service agencies within the Region of Peel. Since 2008, the Vcom System has delivered an average of one million minutes of airtime per year.

The following are noteworthy activities from the past year:

- **System Users:**

At present, the Vcom System supports a total system capacity of 5,514 radios at a Public-Safety Grade of Service. System loading to date is well within operational tolerances. Average Site Utilization during the past 12 months was 23.5%. Service levels remain acceptable during this reporting period.

Current users of the Vcom system along with the number of radios as of April 2022 are:

Peel Regional Police *	1916	35.1%
Brampton Fire & Emergency Services *	307	5.6%
Caledon Fire & Emergency Services *	198	3.6%
Mississauga Fire & Emergency Services *	368	6.8%
Region of Peel Works *	615	11.3%
Total Vcom Group	3404	62.4%
City of Mississauga Non-Emergency	1237	22.7%
Canada Border Services Agency (CBSA) – Toronto Pearson International Airport	810	14.9%
Total Vcom Users	2047	37.6%
Grand Total of All Vcom System Users	5451	100.0%

* denotes Vcom Group member, others are Vcom Users.

3. Organizational Wellness / Occupational Health and Safety / Risk Management

- **Private Public Safety LTE Project**

Vcom has initiated a project to establish a private public safety LTE Broadband network within the Region of Peel. Vcom has identified 9 sites throughout the Region which will provide good coverage for the initial deployment.

In late 2020, the PSBN LTE network was operationalized and available for Vcom partner use. Vcom is currently working with all interested partners in piloting the LTE network for their individual needs.

In Q4 of 2021 Vcom turned up the first expansion site located at the Inglewood tower, Vcom is working with the GTAA and Motorola to get a site installed at the airport in 2022. This will provide mission critical LTE service to public safety in the airport and enhance the overall coverage.

In March 2022, the final version of the TNCO report was released. This report supports the model that Halton and Peel have been actively lobbying for. The hybrid model allows Halton and Peel to continue to invest in Core and RAN technology with the flexibility of working with the carriers to augment coverage.

Peel Police, along with their PSBN Innovation Alliance members - which represents municipal First Responder agencies covering municipalities with a population of over 4 million people –continue to promote a Canadian Public Safety Broadband Network, which would enable more efficient, reliable, secure, resilient and cost-effective communications for First Responders across Canada.

- ***Vcom Interference from LTE operations in the 800 MHz band***

In May 2018, Vcom received a complaint of coverage in what was known to be an area with good coverage. Upon investigation Vcom found the control channel was degraded to the point of being inoperable, the signal appeared to just disappear. Vcom observed a Rogers Wireless cellular site was within close proximity to the area.

Vcom reached out to Rogers and after a quick test with the Rogers interference specialist, confirmed Vcom's suspicion of interference. Vcom learned that Rogers had begun their deployment of 850 MHz LTE. Vcom received more complaints of subscribers showing "out of range" on the radio display. Vcom and Rogers investigated each area and confirmed the same issue. The new LTE band was interfering with Vcom subscribers on both Motorola and Tait user gear, which poses a serious safety risk to public safety operations within the Region of Peel. Rogers immediately decreased its base station power level on a precautionary basis following the tests and Vcom service returned to normal levels immediately. Rogers will not increase the power to their base stations until the issue can be resolved.

In October 2018, Vcom submitted a report describing the results of these tests to the Federal Government Agency- Innovation, Science and Economic Development (ISED) who oversee radio telecommunications in Canada, describing the situation whereby the Rogers LTE base stations were causing desensitization of Vcom's mobile and portable radios. ISED in turn conducted in-field tests in collaboration with Vcom technologists and Rogers, over three days in March 2019.

In June 2019, ISED sent Vcom and Rogers their findings, which did confirm signal loss but were not able to make a determination on how to proceed. They have requested that continued testing and information gathering continue while the Rogers signal must remain at the decreased level.

Over the course of June 2019 through December 2019, ISED continued to examine their findings. Unable to arrive at a workable solution, ISED has returned to work with Vcom and Rogers and plan to conduct additional testing with our Region. Tests scheduled to begin in late March/early April 2020 were delayed ISED in light of the Covid19 pandemic.

In June of 2020, Vcom and Rogers did extensive testing in a lab environment to collect data. Testing was done to see if a filter could be installed to resolve the interference problem. The lab results showed promise using a filter; Vcom was less impacted when Rogers used filters on their transmitters. During Fall 2020, the testing was taken to the field and the filters were installed on select sites for field verification. The testing did not yield the same results in the lab.

In early 2021 a new approach was taken for the testing, the findings showed that while the Rogers signal did have an impact on Vcom, the Vcom signal is strong enough and posed no major concerns to the performance of user equipment.

Vcom and members of the Public Safety community have pushed back against Rogers at the Radio Advisory Board of Canada (RABC) when they tried to change their conditions of license around the use of spectrum. The issue could pose a problem for Public Safety communications. Vcom again did testing with Rogers but wants to ensure members of the RABC that the testing done explicitly applies to Peel Regional Police/Vcom. We think Rogers will try and use the data to show there are no issues for all Public Safety.

ORGANIZATIONAL IMPACTS

Financial

Vcom operates on a not-for-profit business model. Users only pay for the services required to operate and maintain the Vcom System infrastructure. The P25 Vcom Infrastructure operating budget is based on a Public Safety Grade of Service (GOS) capacity of 5,514 radios. The 2022 per radio operating cost of \$504.43 is an increase of \$18.77 per radio from 2021. This value is based on a total gross operating budget of \$3,068,850 less expected tower revenues of \$287,400. The increase of 3.68% in operating costs was due to a rise in software maintenance, licence fees, wages and Regional chargebacks. These expenses were partially offset by an increase in tower revenues on Vcom tower sites.

CONCLUSION

The Vcom Group is pleased to report that the Vcom System continues to serve the needs of our member municipalities and partner agencies with reliable and cost effective communications.

Approved for Submission:



Anthony Odoardi, Deputy Chief, Innovation and Technology Command

For further information regarding this report, please contact Deputy Chief Anthony Odoardi at extension 4060 or via email at anthony.odoardi@peelpolice.ca

Authored By: James Felton, Manager - VCOM and Support Services, ext. 4940.